

# United States Patent and Trademark Office

| APPLICATION NO.                      | FILING DATE |            | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.          | CONFIRMATION NO. |  |
|--------------------------------------|-------------|------------|----------------------|------------------------------|------------------|--|
| 09/518,492                           | 03/0        | 03/2000    | Ram Kudukoli         | 5150-37301                   | 7614             |  |
| 7                                    | 7590        | 03/31/2003 |                      |                              |                  |  |
| Jeffrey C Hood                       |             |            |                      | EXAMINER                     |                  |  |
| Conley Rose &                        | t Tayon PC  |            |                      | VU, KIEU D                   |                  |  |
| P O Box 398<br>Austin, TX 78767-0398 |             |            | I                    |                              |                  |  |
|                                      |             |            |                      | ART UNIT                     | PAPER NUMBER     |  |
|                                      | ·           |            |                      | 2173 DATE MAILED: 03/31/2003 | 4                |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.  |  | Applicant(s)  | <del></del>   |  |  |  |  |
|---|--|--|---|---------------|--|--|--|--|
|   | 09/518,492   |  | KUDUKOLI ET AL.   |               |  |  |  |  |
| Offic Action Summary  | Examiner   |  | Art Unit  |               |  |  |  |  |
|   | Kieu D Vu  |  | 2173  |               |  |  |  |  |
| Th MAILING DATE of this communication app<br>Period for Reply   | ears on the cover s  | sh et with the co  | rrespondence add  | dress         |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status | 36(a). In no event, however<br>within the statutory minim<br>vill apply and will expire SI<br>cause the application to b | er, may a reply be time<br>num of thirty (30) days<br>X (6) MONTHS from th<br>secome ABANDONED | ly filed will be considered timely ne mailing date of this col (35 U.S.C. § 133). |               |  |  |  |  |
| 1) Responsive to communication(s) filed on 04 A   | <u> Nugust 2000</u> .  |  |   |               |  |  |  |  |
| 2a)☐ This action is <b>FINAL</b> . 2b)⊠ Thi   | is action is non-fina  | al.  |   |               |  |  |  |  |
| 3) Since this application is in condition for allowa  |  |  |   | e merits is   |  |  |  |  |
| closed in accordance with the practice under process of Claims  | ⊏x parte Quayle, 1   | 935 C.D. 11, 45  | 3 U.G. 213.   |               |  |  |  |  |
| 4)⊠ Claim(s) <u>67-166</u> is/are pending in the applicati  | on.  |  |   |               |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |  |  |   |               |  |  |  |  |
| 5) Claim(s) is/are allowed.   |  |  |   |               |  |  |  |  |
| 6)⊠ Claim(s) <u>67-166</u> is/are rejected.   | -  |  |   |               |  |  |  |  |
| 7) Claim(s) is/are objected to.   |  |  |   |               |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or   | election requirem  | ent.   |   |               |  |  |  |  |
| Application Papers  |  |  |   |               |  |  |  |  |
| 9) The specification is objected to by the Examiner   |  | or to the E  | •   |               |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) accep  | , ,  | -  |   |               |  |  |  |  |
| Applicant may not request that any objection to the 11) The proposed drawing correction filed on  |  | •  | · ·   | -             |  |  |  |  |
| If approved, corrected drawings are required in rep   |  |  | ed by the Examine   | 1,            |  |  |  |  |
| 12) The oath or declaration is objected to by the Examiner.   |  |  |   |               |  |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120   |  |  |   |               |  |  |  |  |
| 13)☐ Acknowledgment is made of a claim for foreign  | priority under 35 l  | J.S.C. § 119(a)-   | (d) or (f)  |               |  |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None of:  |  | 0  | (-, -, (-,  |               |  |  |  |  |
| 1. Certified copies of the priority documents   | s have been receiv   | ed.  |   |               |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |  |  |   |               |  |  |  |  |
| 3. Copies of the certified copies of the prior  | ity documents have   | e been received  |   | Stage         |  |  |  |  |
| application from the International Bur  * See the attached detailed Office action for a list of   | eau (PCT Rule 17 of the certified copi   | .2(a)).<br>ies not received  |   |               |  |  |  |  |
| 14)⊠ Acknowledgment is made of a claim for domestic   | priority under 35  | U.S.C. § 119(e)  | (to a provisional   | application). |  |  |  |  |
| a) ☐ The translation of the foreign language pro-<br>15)☐ Acknowledgment is made of a claim for domestic  |  |  |   |               |  |  |  |  |
| Attachment(s)   | •  |  |   |               |  |  |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.  | 5) 🔲 N   |  | PTO-413) Paper No(s<br>tent Application (PTO                                      |               |  |  |  |  |

Art Unit: 2173

#### **DETAILED ACTION**

# Specification

1. The specification is objected because the Provisional Application Number cited on page 1 is incorrect. The correct Provisional Application number should be 60/149942.

#### Oath/Declaration

2. A new oath or declaration is required because the Provisional Application Number is incorrect. The correct Provisional Application number should be 60/149942. The wording of an oath or declaration cannot be amended. If the wording is not correct or if all of the required affirmations have not been made or if it has not been properly subscribed to, a new oath or declaration is required. The new oath or declaration must properly identify the application of which it is to form a part, preferably by application number and filing date in the body of the oath or declaration. See MPEP §§ 602.01 and 602.02.

### Claim Rejections - 35 USC § 101

- 3. 35 U.S.C. 101 reads as follows:
  - Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
- 4. Claims 161-163 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter since these claims 161 and 163 claim "A

Page 2

client program" per se and does not positively recite that the program is stored on a medium that can be read by a machine. As such, the claimed invention is not directed to a machine readable medium or a manufacturer article.

## Claim Rejections - 35 USC § 112

- 5. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 6. Claims 70 and 88 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 70 recites the limitation "the block diagram portion". There is insufficient antecedent basis for this limitation in the claim.

Claim 88 recites the limitation "the group". There is insufficient antecedent basis for this limitation in the claim.

# Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2173

Claims 67-74, 130, 138-144, 160, and 164-166 are rejected under 35
 U.S.C. 102(e) as being anticipated by McDonald et al ("McDonald", USP 5966532).

Regarding claims 67-68, 138-139, 160, 165-166, McDonald teaches the creating of a first program, when executing, programmatically creating a new graphical program (col 3, lines 61-63) without any user input specification (automatically, col 3, line 62)

Regarding claims 69 and 140, McDonald teaches the new graphical program comprises a plurality of interconnected nodes which visually indicate functionality of the new graphical program (Fig. 31).

Regarding claims 70 and 141, McDonald teaches the new graphical program comprises a diagram portion comprising a plurality of interconnected nodes and a user interface portion (Fig. 31); wherein said programmatically creating the new graphical program includes creating the block diagram portion and the user interface portion (step 266 in Fig. 5).

Regarding claims 71 and 142, McDonald teaches the new graphical program is a virtual instrument (col. 11, lines 4-7).

Regarding claim 72, McDonald teaches the executing the first program in a first computing environment; said first computing environment is connected to a second computing environment (inherent from step 202 in Fig. 2); said executing the first program comprises sending information from the first computing environment to the second computing environment (step 202 in Fig. 2); and the new graphical program is created in the second computing environment (col 11, lines 18-19).

Art Unit: 2173

Regarding claims 73 and 143, McDonald teaches the creating a plurality of graphical program objects in the new graphical program in response to said executing the first program (front panel objects or controls, col 4, lines 3-7); and interconnecting the plurality of graphical program objects in the new graphical program in response to said executing the first program; wherein the interconnected plurality of graphical program objects comprise at least a portion of the new graphical program (col 4, lines 2-3).

Regarding claims 74 and 144, McDonald teaches the creating one or more user interface objects in response to said executing the first program, wherein the one or more user interface objects perform one or more of providing input to or displaying output from the new graphical program (col 4, lines 3-7).

Regarding claims 130 and 164, McDonald teaches the creating a first program which, upon execution, includes a graphical program creation function for programmatically creating a new graphical program (col 3, lines 61-63) and an object creation function for programmatically including an object in the new graphical program (col 4, lines 3-7).

9. Claims 112-129, 137, 151-159, and 161-163 are rejected under 35 U.S.C. 102(e) as being anticipated by Sojoodi et al ("Sojoodi", USP 6437805).

Regarding claim 112, Sojoodi teaches the creating of a first graphical program which includes object creation nodes and graphical program objects which are connected (col 5, lines 40-47).

Art Unit: 2173

Regarding claims 113-114, Sojoodi teaches invoke node to invoke a connect method (col 6, lines 15-19), wherein the connect method is operable to connect two graphical program objects; providing references to the first object and the second object as inputs to the invoke node (col 57, lines 39-42).

Regarding claims 115 and 137, Sojoodi teaches the creating a first program which includes reference to an existing graphical program (col 54, lines 18-30) and modifying the existing graphical program in response to the execution of the first program (col 18, lines 63-67).

Regarding claim 116, Sojoodi teaches the modifying the existing graphical program without any user input (automation, col 18, lines 63-67).

Regarding claim 117, Sojoodi teaches the existing graphical program comprises a plurality of interconnected nodes which visually indicate functionality of the existing graphical program (col 5, lines 41-47).

Regarding claim 118, Sojoodi teaches a diagram portion comprising a plurality of interconnected nodes (col 5, lines 46-47).

Regarding claims 119 and 123, Sojoodi teaches a user interface portion (col 5, lines 66-67)

Regarding claim 120, Sojoodi teaches the existing graphical program is a virtual instrument (VI, col 13, lines 62-65).

Regarding claim 121, Sojoodi teaches first and second computing environment which are connected (col 48, lines 12-17).

Art Unit: 2173

Regarding claim 122, Sojoodi teaches the existing graphical program includes a plurality of graphical program objects (col 5, lines 41-47)

Regarding claim 124, Sojoodi teaches a first graphical program (col 5, lines 41-42),

Regarding claim 125, Sojoodi teaches wherein the first graphical program includes nodes (col 5, lines 41-42).

Regarding claims 126-129, Sojoodi teaches an invoke node (col 6, lines 15-19) or a property node (col 5, lines 48-65).

Regarding claims 151 and 155, Sojoodi teaches a system for programmatically creating a graphical program comprising a computer system including a CPU (200) and memory (204 and 206), a client program executing in the computer system, the client program performs API calls to programmatically create a graphical program (col 5, lines 28-30), a server program operable to receive the client program calls to programmatically create a graphical program and operable to perform the respective operations (col 4, lines 43-53).

Regarding claim 152, Sojoodi teaches that the server program executes on another computer system which is connected to said computer system via a network (Fig. 1A).

Regarding claims 153-154, Sojoodi teaches the creating a graphical program by obtaining a reference to a software component (col 58, lines 42-44) and invoking methods of the software component (col 6, lines 15-19).

Art Unit: 2173

1

Regarding claim 156, Sojoodi teaches a client graphical program which includes a graphical program creation node for creating new graphical program (col 5, lines 27-30).

Regarding claim 157, Sojoodi teaches a property node for getting property a property of the graphical program object (col 5, lines 48-52; col 6, lines 21-22).

Regarding claim 158, Sojoodi teaches an invoke node for invoking a method on the graphical program object (col 6, lines 15-19).

Regarding claim 159, Sojoodi teaches the connecting graphical program objects (col 57, lines 34-42)

Regarding claims 161-162, Sojoodi teaches a client program for creating a new graphical program which comprises means for instantiating the new graphical program (col 5, lines 28-32), means for adding an object to the new graphical program (col 38, lines 55-59), a means for getting or setting properties of the new graphical program or the object (col 6, lines 21-22); a means for invoking methods on the new graphical program or the object (col 6, lines 15-17).

Regarding claim 163, Sojoodi teaches a client program comprising means for obtaining a reference to the graphical program and to a particular object of the graphical program (col 5, lines 53-63), a means for getting or setting properties of the graphical program or the object (col 6, lines 21-22) and means for invoking methods on the graphical program or the object (col 6, lines 15-17).

Application/Control Number: 09/518,492 Page 9

Art Unit: 2173

### Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claims 75-111, 131-136, and 145-150 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDonald and Sojoodi et al ("Sojoodi", USP 6437805).

Regarding claim 75 and 131, 148, McDonald does not teach that the first program is a first graphical program. However, such feature is known in the art as taught by Sojoodi. Sojoodi teaches a system for accessing object capabilities in a graphical program (col 5, lines 28-32). It would have been obvious to one of ordinary skill in the art, having the teaching of McDonald and Sojoodi before him at the time the invention was made, to modify the programming system taught by McDonald to include the first graphical program taught by Sojoodi with the motivation being to enhance the visualization of the graphical programming system.

Regarding claims 76 and 96, and 149-150, Sojoodi teaches the first graphical program includes at least one object creation node (col 5, lines 27-30)

Regarding claim 77, Sojoodi teaches the first graphical program further includes a property node and the property node getting or setting a property of the graphical program object in response to said executing the first graphical program (col 5, lines 48-52).

Art Unit: 2173

Regarding claim 78, Sojoodi teaches the object creation node outputs a reference to the graphical program object (col 5, lines 66-67).

Regarding claim 79, Sojoodi teaches an invoke node for invoking a method on the graphical program object (col 6, lines 15-19).

Regarding claim 80, Sojoodi teaches the object creation node outputs a reference to the graphical program object, the invoke node receives as input the reference to the graphical program object and the invoke node invokes a method on the graphical program object specified by the reference to the graphical program object (col 5, lines 53-65).

Regarding claims 81-82, Sojoodi teaches the connecting the graphical program object to another graphical program object in the new graphical program (col 5, lines 41-47).

Regarding claim 83, Sojoodi teaches moving the graphical program object to another location in the new graphical program (col 56, lines 38-41)

Regarding claims 84-85, Sojoodi teaches displaying the object creation node; specifying a graphical program object class for the object creation node (col 13, lines 47-56)

Regarding claim 86, Sojoodi teaches the specifying position information to the object creation node (col 15, lines 32-36).

Regarding claims 87-88, Sojoodi teaches specifying owner reference information for the object creation node, the owner reference information designates an owner entity (col 15, lines 32-38)

Art Unit: 2173

Regarding claims 89-90, Sojoodi teaches the graphical program includes a block diagram, wherein the at least one graphical program object is a function node or a programmatic structure placed in the block diagram (col 16, lines 15-17).

Regarding claim 91, Sojoodi teaches the new graphical program includes a user interface panel (col 16, lines 9-10

Regarding claims 92-94, Sojoodi teaches the new graphical program also includes a block diagram, the providing input to the new graphical program (col 13, line 4) or viewing output of the new graphical program (col 13, lines 5-6).

Regarding claim 95, Sojoodi teaches a block diagram and the user interface object is a user interface output object placed in the user interface panel for viewing output from the block diagram (col 13, lines 1-6).

Regarding claims 97-98, Sojoodi teaches the specifying a new graphical program type (col 6, lines 12-15).

Regarding claims 99-100, McDonald teaches a template graphical program wherein said creating the new graphical program comprises creating the new graphical program based on the template graphical program (col 3, lines 63-66).

Regarding claims 101,102, and 104, Sojoodi teaches the specifying a reference to a server program for the graphical program creation node (col 5, lines 8-10)

Regarding claim 103, Sojoodi teaches a server program reference input (VI Server Refnum Control 274A in Fig. 37)

Art Unit: 2173

Regarding claim 105, Sojoodi teaches a graphical program creation node operable to programmatically create the new graphical program (col 5, lines 41-46) and configuring the object creation node with one or more inputs (col 5, lines 48-53).

Regarding claim 106, Sojoodi teaches the graphical program creation node outputs a reference to the new graphical program (line 66 of col 5 to line 1 of col 6).

Regarding claims 107-108, Sojoodi teaches a server reference for the graphical program creation node (VI Server Refnum Control 274A in Fig. 37).

Regarding claim 109, Sojoodi teaches specifying an object class for the object creation node (col 13, lines 47-56), specifying position information to the object creation node (col 15, lines 32-36), and specifying owner reference information for the object creation node (col 15, lines 32-38).

Regarding claims 110-111, Sojoodi teaches plurality of object creation nodes and graphical program objects which are connected (col 5, lines 40-47).

Regarding claim 132, Sojoodi teaches the first program is a text-based program (col 15, line 1).

Regarding claim 133, Sojoodi teaches a method call (col 31, lines 39-41).

Regarding claim 134, Sojoodi teaches the text-based program obtains a reference to a software component (col 58, lines 42-44).

Regarding claim 135, Sojoodi teaches the software component interfaces with a server program (col 14, lines 41-46).

Regarding claim 136, Sojoodi teaches the software component is an ActiveX component (col 57, line 62).

from a server for a variety of applications.

Art Unit: 2173

Regarding claims 145-147, McDonald does not teach the program is operable to interface with a server program. However, such feature is known in the art as taught by Sojoodi. Sojoodi teaches a system for accessing object capabilities in a graphical program which comprises a network (Fig. 1A) and a server program 252 which is an application instance of graphical programming development (col 14, lines 32-46). It would have been obvious to one of ordinary skill in the art, having the teaching of Sojoodi and McDonald before him at the time the invention was made, to modify the programming system taught by McDonald to include the server taught by Sojoodi with the motivation being to enable a graphical program to be able to invoke objects

Page 13

- 12. The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach about graphical programming system which relates to the claimed invention.
- 13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kieu D. Vu whose telephone number is (703-605-1232). The examiner can normally be reached on Mon Thu from 7:00AM to 3:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca, can be reached on (703-308-3116).

The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(703)-746-7238 (After Final Communication)

Art Unit: 2173

(703)-746-7239 (Official Communications)

(703)-746-7240 (For Status Inquiries, draft communication)

and / or:

(703)-746-5639 (use this FAX #, only after approval by Examiner, for

"INFORMAL" or "DRAFT" communication. Examiners may request that a formal paper / amendment be faxed directly to them on occasions)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703-305-3900).

Kieu D. Vu

March 21, 03

JOHN CABECA

Page 14

SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2100